

Claims

1. A controller with a control circuit that contains a feedback path coupled back to the feedback input of the control circuit, with a sensor (S) that is arranged in the control circuit and emits a sensor signal at its output, which is converted into a feedback signal
5 and routed back to the feedback input of the control circuit, characterized by

- an error signal generator (F) that generates an error signal and feeds it into the control circuit,

- a detector (D), which monitors measuring signal of the control circuit,

10 - a control device (KS) in the control circuit, which sets the output signal (I2) of the control circuit to a predetermined value as a function of the output signal of the detector.

2. The controller according to claim 1, characterized in that the detector (D)
15 contains a storage device (SP) and a comparator (EC), which compares the measuring signal of the control circuit with a signal stored in the storage device (SP).

3. The controller according to claim 2, characterized in that the comparator (EC)
is connected with a decider logic (E), which actuates the control device (KS).

4. The controller according to claim 1 to 3, characterized in that the control device (KS) contains a clamp circuit that sets the output signal (I2) of the control circuit to the predetermined value.

5 5. The controller according to claim 3, characterized in that the detector (D) contains a signal level comparator (LC) and/or a signal sign comparator (SC), whose input is connected with the control circuit, and whose output is connected with the decider logic (E).

10 6. The controller according to one of claims 3 to 5, characterized in that the error signal generator (F) is connected with a time signal generator (TC) and/or the detector (D), and generates the error signal as a function of its output signal.

15 7. The controller according to one of claims 1 to 5, characterized in that a magnetoresistive sensor (S) is provided for acquiring a magnetic field.

8. A method for operating a controller according to one of claims 1 to 7, in which a sensor (S) arranged in a control circuit emits a sensor signal, which is converted into a feedback signal and routed back to a feedback input of the control circuit, characterized by
20 the following steps

- an error signal of an error signal generator (F) is injected into the control circuit,

- a detector (D) monitors a measuring signal of the control circuit, and compares the measuring signal with a previously stored signal,

- if a prescribed criterion is satisfied, the detector generates an output signal, which

- actuates a control device (KS) in the control circuit, which in turn sets the output

5 signal (I2) of the control circuit to a predetermined value.

9. The method according to claim 8, characterized in that the measuring signal of the control circuit is stored in a storage device (SP), and a second measuring signal is compared with the stored measuring signal in a comparator (EC).

10. The method according to claim 9, characterized in that an output signal of the comparator (EC) actuates a decider logic (E), and the latter actuates a control device (KS), which sets an output signal of the control circuit to a value if a prescribe criterion is satisfied.

11. The method according to one of claims 8 to 10, characterized in that a signal level comparator (LC) and/or a signal sign comparator (SC) of the detector (D) acquire the measuring signal of the control circuit, and emit a signal to the decider logic (E) on the output side.

12. The method according to one of claims 8 to 11, characterized in that the error signal generator (F) is actuated by a time signal generator (TC) and/or the detector (D), and generates the error signal as a function of their output signals.